

REMARKS

Claims 1 and 9-11 have been cancelled, claims 2, 8, 22, and 31-33, 35, 36 have been amended, and new claim 37 has been added. Thus, claims 2-8 and 12-37 are pending in the present application. Favorable reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicant requests that the Examiner carefully review any references discussed below to ensure that Applicant's understanding and discussion of the references, if any, is consistent with the Examiner's understanding.

1. Rejections Under 35 U.S.C. § 102 and Alternatively Under 35 U.S.C. § 103

Claims 1-6, 8-10, 22-27, 29-33, 35 and 36 have been rejected under 35 U.S.C. § 102(b) as being anticipated by or in the alternative, under 35 U.S.C. § 103(a) as obvious over JP 2001-217469 ("JP '469"). Applicants respectfully traverse.

Independent claim 1 and dependent claims 9 and 10 have been cancelled. Claims 2 and 8 have been amended to depend from allowed claim 17 and claims 3-7 have been amended to depend directly or indirectly from claim 2. Accordingly, for at least the reason that claim 17 has

been allowed by the Examiner, Applicant respectfully requests the allowance of claims 2-6 and 8.

Independent claims 22, 31-33, 35, and 36 have been amended to recite some form of a segmented gap region. By way of example, claim 22 now recites: "wherein the gap region is segmented and comprises a first layer of a semiconductor material and a second layer of a metal or a different semiconductor material." Applicant submits that claims 22, 31-33, 35, and 36 are now allowable over the cited prior art for at least the reason that claims 11 and 17, which contain this subject matter, have previously been allowed by the Examiner. In addition, however, a detailed reading of *JP '469* shows that such a segmented gap region is not disclosed or suggested. More particularly, *JP '469* does not teach or suggest that such a segmented gap region in conjunction with the other structures and methods claimed herein would be beneficial in a thermoelectric energy converter.

Since *JP '469* does not disclose or suggest each and every element in present claim 22, 31-33, 35, and 36, *JP '469* cannot anticipate or obviate these claims. Claims 23-30 depend from claim 22 and are therefore patentable over *JP '469* for at least the same reasons as claim 22. As such, Applicant respectfully requests the withdrawal of the rejection of claims 22-27, 29-33, 35 and 36 under 35 U.S.C. § 102 and 103.

2. Rejections Under 35 U.S.C. § 103

Claims 7 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *JP '469*. In response, the Applicant respectfully asserts that claims 7 and 28 are not obvious over the prior art for at least the reasons set forth above with respect to claims 17 and 22, from

which claims 7 and 28 depend. Accordingly, Applicant respectfully requests the withdrawal of this rejection and the prompt allowance of claims 7 and 28.

3. Allowable Subject Matter

Applicant respectfully thanks the Examiner for the indication that dependent claims 11-16 contain allowable subject matter and would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claim. However, claims 11-16 now depend from claim 17, which has been previously allowed by the Examiner. The Applicant therefore respectfully requests allowance of these claims in their current form.

CONCLUSION

In view of the foregoing, Applicants respectfully request favorable reconsideration and allowance of all the presently pending claims. In the event the Examiner finds any remaining impediment to the prompt allowance of this application, which could be clarified by a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney.

Dated this 29th day of August 2005.

Respectfully submitted,



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